

# GRASSLAND TODAY

## The Grassland Wetlands Newsletter

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November/December 2005

### *Age Ratios of Mallard, Green-winged Teal, Shoveler and Pintail Revealed in Survey*

On opening weekend the past 22 years Department of Fish and Game has collected the wings of species of ducks that represent 85 percent of the harvest in the Grasslands. The goal is to evaluate the age ratio of the harvest, which is an indication of reproductive success.

On Oct. 22–23 biologist Greg Gerstenberg collected wings from mallard, pintail, green-winged teal and shoveler as he has done since about 1990, but this time, it was difficult for him to draw conclusions.

“We had a very good local duck production so I expected the mallard age ratios—the number of juveniles to adults—to be up significantly,” he said. “I thought the juvenile-to-adult ratio would be higher than 8.9 compared to 6.7 the previous year. But it wasn’t. I would have expected to see a half- to one-bird more for juveniles because there were so many broods in a lot of places in the Grasslands this year. It seemed like a very good summer for production.”

Gerstenberg also noticed what he called “a huge disparity” among mallards between public and private areas.

He also is concerned about the poorest juvenile-to-adult ratio among the wings of green-winged teal taken on opening weekend in 22 years. The 88,000-bird index in the pre-season flight seemed to be “very normal” for greenwings in an October survey. But, was green-winged teal production as bad as indicated by the wing survey?

“It could be a differential in migration,” Gerstenberg said. “We’ll know as the season progresses. Teal don’t start here like local mallards and we generally get a big influx by early December—that’s our peak—when the index doubles in size.”

He suspects shovelers had a very good production this year based on his work at check stations. “I’m seeing a lot of juvenile shovelers out there,” he said.

Here’s Gerstenberg’s complete report:



**Good Summer Production** — Local mallards and their broods were seen in many locations throughout the Grasslands. As a result, the juvenile-to-adult ratio has improved.

Opening weekend waterfowl harvest is in part correlated to the age structure of the population. The objective of this survey is to provide waterfowl managers and hunters with an index of the age structure present in the northern San Joaquin Valley at the start of the hunting season.

Wings were collected at most public waterfowl hunt areas and selected pri-

ivate duck clubs on opening weekend in the northern San Joaquin Valley. Four waterfowl species were examined: mallard, northern pintail, northern shoveler, and green-winged teal. Distribution of waterfowl during the pre-season waterfowl flight indicated most ducks were primarily located on the private duck clubs with most on a few clubs. Shovel-

*(Continued, page 2)*

### ***Ducks Unlimited’s Water Program Helps Wetland Managers***

Most waterfowl hunters understand that a wetland isn’t a wetland without water, and without habitat, waterfowl numbers decline. Further, with no birds in the sky, there will be none in the bag. While this link between water and hunting may seem fairly strong, it is fast becoming a tenuous chain, especially here in the Golden State.

Fact of the matter is the wetlands and waterfowl we enjoy in California are largely dependent on the same contrived and cleverly engineered water conveyance systems that are used by the largest urban and agricultural water users in the state.

Water does not just magically appear at Gray Lodge Wildlife Area, San Luis National Wildlife Refuge or Los Banos Wildlife Area. It is *delivered*. Wetlands have specific water needs for timing, amounts and flows. Yet, these water supplies are often victim to the delivery irregularities that California is so well known for: Too much water when it’s not needed and not enough when it’s needed most. Complicating this is the fact that water costs money, big money.

In response to increasing activity in California’s water market and the potential for that market to drive the cost

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## Grassland Today

The bi-monthly newsletter of the Grassland Water District and the Grassland Resource Conservation District, 22759 S. Mercey Springs Rd., Los Banos 93635.

**Telephone (209) 826-5188 FAX (209) 826-4984**

**Website: <http://www.grasslandwetlands.com>**

**E-Mail: [veronica@grasslandwetlands.com](mailto:veronica@grasslandwetlands.com)**

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The Grassland Water District and the Grassland Resource Conservation District are dedicated to providing water and habitat protection for waterfowl, shorebirds, plants and other wildlife and in promoting associated educational and recreational opportunities.

### Grassland Staff

Don Marciochi, *General Manager*

Veronica Woodruff, *Assistant General Manager, Administration*

Scott Lower, *Assistant General Manager, Operations*

Peter Ottesen, *Editor*

Richard Wright, *Biologist*

### Cooperating Agencies

Greg Gerstenberg, (209) 826-0463

*California Department of Fish and Game*

Loren Ruport, (209) 826-3508

*U.S. Fish and Wildlife Service*

Malia Hildebrandt, (209) 722-4119 (x3)

*Natural Resources Conservation Service*

### Grassland Water District

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*Clear Lake Land & Cattle*

(408) 298-3134

Byron Hisey

*Hollister L&C*

(209) 862-2174

Bob Nardi

*Hollister L&C/WillowFarms*

(510) 352-3059

Doug Federighi

*Gustine Land & Cattle*

(510) 635-1155

Tom Mackey

*Riverfield*

(510) 523-2425

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(209) 826-2430

Keith Toon

*Hollister L&C*

(510) 352-6228

Don Dawson

*Cherokee Land & Cattle*

(209) 854-6682

Dennis Campini

*Stillbow Gun Club*

(209) 761-5511

## Wing Survey Results...(continued from page 1)

ers were present on many of the private clubs. No significant rainfall occurred in the months prior to season opening.

Wings from ducks shot on opening weekend were collected, aged and sexed during the first week following the opening of duck season. A total of 1,849 (1,489 in 2004) wings were examined: mallard 711 (419), northern pintail 193 (70), northern shoveler 298 (306), green-winged teal 647 (694).

Wings with characteristics that allowed sex and age determinations were used. Weather conditions on opening weekend were clear and calm with light north winds. Opening day was October 22, the average date for opening of the season. The pre-season waterfowl survey was completed the Wednesday before the season. The waterfowl limit is seven ducks total with species restrictions. Mallard limit is five with one hen, and pintail is one of either sex. Spinning winged decoys are not allowed until December 1. Here's a comparison for each species:

### Mallard

Age ratio for mallard was 8.9 immature per adult. This ratio of immature per adult indicates an above average nesting season (average of 6.7 immature per adult). The male to female ratio was 3.8, which is above the average (2.1). An above average sex ratio indicates the potential of a poor nesting season (fewer juvenile hens in the population to lower the sex ratio). Local production within the grasslands appeared to be excellent. Mallard numbers in the northern San Joaquin Valley the week prior to opening weekend were below average. The peak mallard population in the northern San Joaquin Valley generally occurs in mid-November to early December.

Some of the clubs and wildlife areas had good to excellent success on mallards opening weekend. Overall harvest of mallards on state-operated wildlife areas was up from last year. A significant difference in mallard age ratios occurred between the private clubs (17.8 immature per adult) and wildlife areas (7.1 immature per adult). Observed mallard numbers on the wildlife areas were low during the pre-season waterfowl survey. Wildlife areas are dominated by traditional mallard habitat but delayed flooding may have reduced

the number of young mallards using some of the wildlife areas and could result in a lower age ratio than present in the population.

The majority of the mallard wings used in this survey are from wildlife areas. This bias may have underestimated the young in the population and could result in lower ratios than years when significant mallard numbers are present on the wildlife areas. Early season mallard harvest is dominated by birds that were raised in California. Production in areas north of California was unknown at the time of this writing. The breeding pair survey indicated a population slightly above last year but below the long-term average. This year's breeding index is the sixth consecutive year below the long term average. With an above average age ratio on opening weekend, the prediction for mallard harvest this year is for a good early season. Total harvest for this year should be up from last year.

### Northern Pintail

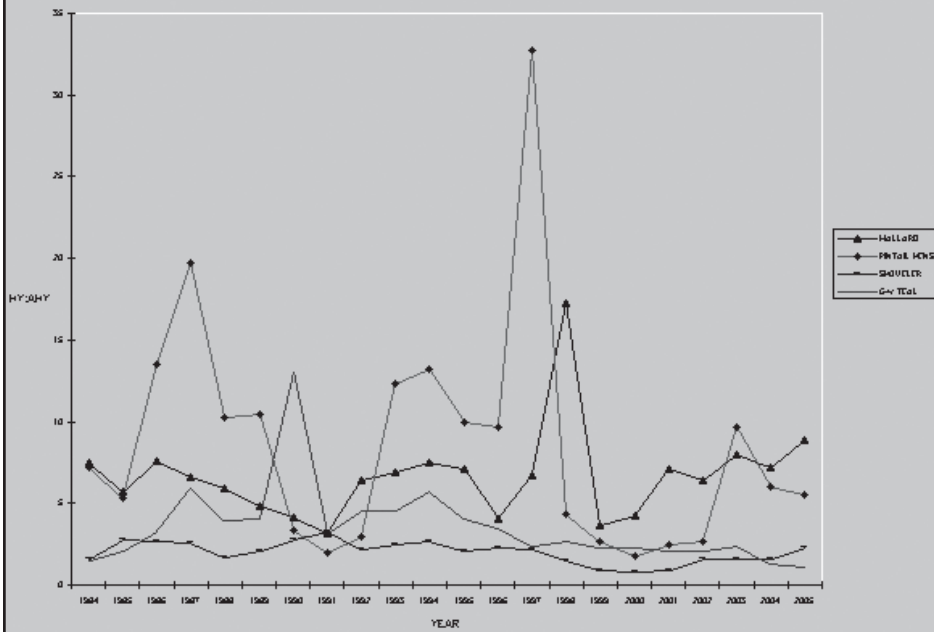
Age ratio for pintail was 1.0 immature per adult (average of 1.4). The age ratio for female pintail was 5.5 immature per adult (average 8.5) and represents a below average reproductive season. The sex ratio was 13.8 male per female, which is the highest recorded in the survey. Due to a high selectivity for white birds which often are the adult males and the habit of pintail to be in flocks, the total age ratio for pintail is never high. The best indicator for the nesting season is in the hen ratio. The local pintail population was up from last year. The majority of the pintail observed during the pre-season flight were on private duck clubs and Kesterson National Wildlife Refuge. The age ratio of pintail was significantly higher on private lands (1.4 immature per adult) than public lands (0.5 immature per adult). Last year the majority of the pintail had left the northern San Joaquin Valley prior to opening weekend. It is predicted that pintail harvest will be up significantly from last year due to more pintail available (compared to last year) and a one bird limit throughout the entire duck season.

### Northern Shoveler

Shoveler age ratio was 2.3 immature per adult, which is the highest age ratio

(Continued, page 3)

**AGE RATIOS OF FOUR DUCK SPECIES  
ON OPENING WEEKEND, 1984-2005**



since 1997. Sex ratio was 1.1 male per female, which is average (1.1). Age ratios indicate an above average reproductive season. The pre-season waterfowl survey had an increased index for shoveler. Predictions are for an increase in the fall population and significantly higher harvest.

**Green-winged Teal**

The age ratio for green-winged teal was 1.1 immature per adult, down from last year and the lowest in the 22 years of this survey. The average age ratio is 3.5 immature per adult. This below average ratio is the 9<sup>th</sup> year in a row well below average. The sex ratio was 3.8 males per female and is above the average of 2.9. It appears there may have been a poor reproductive season for green-winged teal. The pre-season waterfowl survey had an index of 88,010, nearly average for the pre-season flight. Harvest predictions are for this year to be lower or similar to last year.

In summary, by examining wings collected from opening weekend, this year's reproduction appears to be above average for mallard and shoveler, and below average for pintail and green-winged teal. It is anticipated that this year's wintering population of ducks will be up for mallard and shoveler, and similar to below last year for green-winged teal.

Pintail population should be up from

last year during the early season and may be below last year's late season. Predictions for duck harvest are for a season with increased mallard and shoveler harvest and may be below average for green-winged teal. Weather is often the largest influence on waterfowl harvest so these predictions on harvest may not hold true.

**Board of Directors  
Election Results**

An incumbent and a newcomer have been elected to four-year terms on the Board of Directors of the Grassland Water District, according to results issued by the Merced County Registrar of Voters.

Newly elected directors Pepper Snyder and Byron Hisey will take office on Nov. 25.

Snyder, the current president of the five-member panel, garnered 17,265 votes. Newcomer Hisey received 17,203 votes. Only owners of property within the Grassland Water District were eligible to vote in the election that saw five candidates running for two positions.

Unsuccessful candidates included Jeff Kerry with 9,697 votes, followed by Bill Parham with 6,357 votes and Joe Collura with 5,975 votes.

Further information about the election is available from Veronica Woodruff, assistant general manager, Grassland Water District at (209) 826-5188.

**Grassland Notes**

• **Dark goose survey** — Department of Fish and Game biologist Greg Gerstenberg flew the annual dark goose count on Nov. 2, finding 4,975 birds using the Grasslands. Specifically he noted 705 white-fronted geese using the central, north and east Grasslands and 4,270 small Canada geese found only on the north Grasslands. "We don't get dark geese early in the season," Gerstenberg said. "They tend to stay mostly in the Sacramento Valley."

\* \* \*

• **Indicator species** — During a pre-season survey taken Oct. 19 scientists found 4,100 white-faced ibis and 1,300 sandhill cranes, two species that have benefited from guaranteed water under the Central Valley Project Improvement Act. Before the act was put in place in 1992 there were no known breeding pairs of ibis in the northern San Joaquin Valley. Currently there are more than 2,000 breeding pairs. In addition to ibis and cranes, surveyors counted approximately 450,000 waterfowl, many of which stayed in the Grasslands to take advantage of early water made available to them in July and August.

\* \* \*

• **History of commercial duck hunting in Los Banos** — Los Banos historian and Milliken Museum curator Charles Sawyer's fourth book, *Our Sport: Market Hunting*, was recently published. The book, which provides an historical account of the commercial duck hunting industry can be purchased in Los Banos at the Milliken Museum, 905 Pacheco Blvd., or at Phoenix Books, 936 Sixth St. The cost is \$23.95 plus tax. Proceeds will be donated to the Milliken Museum.

\* \* \*

• **Mailing list update** — If you would like to receive *Grassland Today*, the official newsletter of the Grassland Water District, send your name and address to Veronica Woodruff, 22579 Mercey Springs Road, Los Banos, CA 93635 or e-mail to: Veronica@grasslandwetlands.com.

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• **Large grant** — Ducks Unlimited's 2006 North American Wetland Conservation Act proposal has been approved with \$400,000 going to projects in the Grasslands.

## ***Water District Invited to Participate in General Plan***

The City of Los Banos is updating its general plan that will guide growth over the next decade and has invited the Grassland Water District to participate in its development. Planning is critical to protecting sensitive wetlands habitat that surrounds the city and serves as a valuable resource for the community.

"We're just starting the process and we're pleased Mayor Mike Amabile wants our early input into the plan," said Don Marciochi, general manager of the Grassland Water District. "They seem very willing to listen."

Marciochi has suggested there should be a special technical advisory committee made up of wildlife folks—California Department of Fish and Game, U.S. Fish and Wildlife Service and Grassland Water District—to work with the city and its consultant.

"We want to provide specific information about the importance of wetlands that surround the city and the need for policies that offer protections into the future as they develop the general plan," Marciochi said.

## ***Project Will Develop Ground Water Supply for the GWD***

The San Luis-Mendota Water Authority, of which the Grassland Water District is a member, has proposed a pilot project involving development of ground water supplies for use on wetlands.

Under the project, the SLMWA intends to install two new wells on the Volta Wildlife Area, with water produced from these wells to begin flowing in spring 2006. The newly developed water would be used within the Grassland Water District and nearby refuges.

"The Central Valley Project Improvement Act has a provision that says there should be attempts to diversify the sources of Level 2 needed by refuges," said Don Marciochi, general manager, Grassland Water District. "The purpose of the project is to alleviate demand on project water and substitute it with water from another source. One half of the water produced by the wells will go toward Level 4 supplies."

Marciochi hopes to receive as much as 7,000 to 10,000 acre-feet of water from the wells at Volta WA. "We'll see if this can be expanded to include other wells in the future," he said.

## ***Ducks Unlimited Delivers Projects***

Delivery of the habitat objectives of the third and final phase of Ducks Unlimited's Grasslands Ecological Area NAWCA Grant has been completed, and details of the most recent projects completed are summarized below.

Ducks Unlimited received funding through the North American Wetlands Conservation Act (NAWCA), with non-Federal match funds provided by the California Dept. of Fish and Game, Wildlife Conservation Board, Grassland Water District, and Ducks Unlimited.

### **Mud Slough Restoration:**

Work to restore natural hydrology to the Mud Slough in the North Grasslands has been completed. This project will improve the flow capacity of the slough to improve water conveyance from adjacent private wetlands that can now optimize management objectives without harmful flooding events during periods of heavy precipitation.

### **Los Banos WA, Fields 63-66 Wetland and Riparian Habitat Restoration:**

This project will conserve 260 acres that the DFG will manage to provide seasonal wetlands and upland forage for wintering ducks and geese, and maintain riparian habitat, semi-permanent wetlands, and associated grasslands for locally nesting waterfowl such as mallard, gadwall, and cinnamon teal. All of the major project activities have been completed and the DFG staff will plant upland grasses this fall. The Los Banos WA is open to public hunting during season and the project area will include areas available for dove, pheasant, and waterfowl hunting.

### **Volta WA Westside Canal Restoration:**

The Volta Wildlife Area received a vastly improved water delivery system for 1,800 acres of wetlands on the west side of the Wildlife Area. The improved Westside canal will convey more water and give Volta WA managers additional wetland flooding options that will help conserve water on this important wintering area. The Volta WA is open to public hunting during season and the project area will include areas available for waterfowl hunting.

Chris Hildebrandt, Regional Biologist for DU, states, "The Grasslands Ecological Area project was critical in helping DU conserve over 73,400 acres of wetlands and associated uplands and riparian habitat in the San Joaquin Val-

ley, most of which occurred in the Grasslands. However, our work here is not done! California has lost more than 90% of its wetlands, most occurring in the San Joaquin Valley, and the fight is getting harder to keep the few remaining wetlands in optimal condition for waterfowl using the Pacific Flyway. DU will continue to be active in the Grasslands and the entire San Joaquin Basin, working in coordination with other agency and organization partners to assist both private and public landowners in wetland conservation efforts. In fact, DU was recently awarded a one million dollar NAWCA Grant to conserve additional waterfowl habitats in the Grasslands."

## ***Northern Tulare/San Joaquin Basins 1 NAWCA Grant Approved***

In March of this year, Ducks Unlimited submitted a proposal for Phase 1 of a multi-phase project for funding through the North American Wetlands Conservation Act, to restore and enhance critical public and private waterfowl habitats in the San Joaquin Valley. During their recent council meeting held on September 21, the Migratory Bird Conservation Commission (MBCC) approved the Northern Tulare/San Joaquin Basins 1 project for NAWCA funding. Of interest to Grassland landowners are several projects developed in coordination with GWD personnel to improve water conveyance to private wetlands. DU's Chris Hildebrandt and Rich Wright, CWA/GWD biologist, coordinated with GWD water delivery and maintenance staff to define the most critical water conveyance projects needed in the Grasslands.

Six projects were developed and submitted as part of Phase 1 for funding consideration in the DU proposal. In the South Grasslands, improvements will be made to the Flyway Ditch, Almond Drive Ditch and the Almaden Ditch. In the North Grasslands, the Santa Fe Canal, Garzes Creek, and Fremont Canal will receive much needed enhancements to improve water conveyance. By improving water conveyance to landowner wetlands, GWD staff will be able to conserve critical water resources while improving water deliveries and flooding rates to landowners.

## ***Proposed Federal Legislation Threatens Grassland Water Supplies***

The Grassland Water District and a host of non-profit organizations are expressing grave concerns about proposed legislation by Congressman Devin Nunes of Visalia, author of HR 3691—the Central Valley Project Reform Act of 2005.

Ducks Unlimited's director of public policy Dave Widell—a former assistant general manager of the Grassland Water District—said the legislation would weaken the Department of the Interior's authorities to require mitigating water transfers for Central Valley wetlands and reduce funding for refuge Level 4 water acquisitions.

In a letter to Congressman Nunes, DU outlined its concerns. "The legislation would cripple the refuge water supply provisions of the Central Valley Project Improvement Act of 1992 that have resulted in real and measurable environmental benefits," DU stated. "Largely due to the impoverished condition of Central Valley wetlands during the previous century the CVPIA produced dramatic improvements to habitat conditions within only a few years following its implementation."

For proof DU cited scientific evidence that waterfowl use alone on Central Valley wetlands has increased by roughly 300 percent on newly established habitat and wetland food production increased by nearly fourfold. DU said the dramatic habitat improvements were especially evident in the 180,000-acre Grassland Ecological Area, the largest, contiguous historic marsh that still remains in the Central Valley.

"Without question the CVPIA refuge water deliveries restored traditional migration grounds within the Pacific Flyway and the Grasslands that had all but been destroyed following completion of the Central Valley Project," Ducks Unlimited said. "We believe the Nunes legislation would be devastating to wetlands and associated wildlife by restricting the Bureau of Reclamation's authority to require mitigation and reverting all water transfer oversight to pre-CVPIA authorities."

DU said at a time when more attention should be paid to third party impacts resulting from water transfers it appears HR 3691 is going in the opposite direction.

Currently the CVPIA refuge and Grasslands water supplies are provided

in two increments. Level 2 supplies represent the amount of water historically used by wetland areas in the fall and winter months. Level 4 supplies are those that are intended to provide "optimum" habitat management through the delivery of spring and summer water necessary for food production.

While Level 2 supplies are delivered from Central Valley Project yield, Level 4 supplies must be acquired from willing sellers and purchased with Restoration Fund dollars.

"Relaxing CVPIA provisions that require two-thirds of the Restoration Fund to be used for habitat improve-

ments, eliminating Friant's contribution to the fund and allowing fund revenues to go toward planning exercises associated with increasing project yield will clearly create greater demands against the over-subscribed Restoration Fund," DU said. "This, in turn, will reduce Level 4 refuge water supplies."

Doug Federighi, speaking for the Grassland Water District Board of Directors, said, "The Nunes bill would be a disaster for Grasslands and refuges up and down the Central Valley. It is the most serious threat to wetlands and wildlife that must be defeated."

## ***Grassland Wetlands Approaching Full Water Allotment***

Grassland Water District officials are breathing a sigh of relief now that the Bureau of Reclamation is fast-approaching a full allotment of 180,000 acre-feet to manage critical wetlands habitat.

"We are in good shape for the current water year," said Don Marciochi, general manager of the Grassland Water District. "Last spring we were concerned because we lost the opportunity to purchase water from the Exchange Contractors, including the Central California Irrigation District," Marciochi said. "We lost out early on what had been our primary source of Level 4 water. That water was transferred to agriculture districts in our area."

Fortunately, because of the unprec-

edented amount of rainfall this past winter, the Bureau of Reclamation was able to acquire approximately 55,000 acre-feet of Level 4 water supplies for the GRCD. "The people with Reclamation's Water Acquisition Program are to be credited for a job well done," Marciochi said.

He explained that 125,000 acre-feet of Level 2 water come directly from the Central Valley Project. It is a firm supply that can only be reduced in critically-dry years. "We've received the full amount of Level 2 ever since the Central Valley Project Improvement Act was passed in 1992, with the exception of 1994," he said.

## ***Three-Year Study to Examine Effects of Holding Pond Water***

The Grassland Water District has received a three-year grant from the state Water Resources Control Board to study the effects of holding ponded water longer than it is traditionally held each spring. The project will be carried out by Nigel Quinn of the Lawrence Berkeley National Laboratory.

Don Marciochi, general manager of the Grassland Water District, said typical draw down occurs in March, with water released into the San Joaquin River. "Our attempt here is to work with downstream farmers who have concerns about water quality and water discharged from wetlands in Merced County," he said. "Salt loads are a concern."

The study will include six different sites with two ponded areas on each. Most will be located on Department of Fish and Game lands, but one site will be on a private duck club in the

South Grasslands.

Marciochi explained, "One pond on each site would be a control, where normal water management would take place with water being released at the typical time in March. Water on the other pond would be held back longer and released at a time the San Joaquin River can best assimilate drain water."

That later water release would occur between April 15 and May 15, when there already are additional flows in the river to help push downstream salmon smolts out to sea.

"We'd hold water until that 30-day window," Marciochi said. "Then we'll compare the effects on the ponds. An important part of the study is the DFG, which will monitor the response of the vegetation to make sure we aren't causing some long lasting negative impacts to the wetlands habitat."

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## ***DU's Water Program Helps Wetland Managers...*** (continued from page 1)

and availability of water beyond the reach of both public and private wetland managers, Ducks Unlimited recently announced the establishment of the DU Wetland Water Program. Coinciding with the hiring of the new Western Regional Office director of public policy David Widell, the water program is aimed at developing funding strategies for wetland water acquisition and development, tracking key water programs, securing wetland water supplies through mitigation of water transfers, and increasing the long-term reliability of existing wetland water supplies for the most important wetland complexes.

"Grassland landowners should know that the western regional office of Ducks Unlimited is becoming engaged in government affairs, particularly as it relates to water and land use," said Widell. "The biggest threat to the waterfowl community in the future will be habitat encroachment and water supply availability, if it isn't already. Through Ducks Unlimited's recently launched Wetland Water Program, we hope to help public and private wetland owners better understand their water supply reliability, while also working to secure

truly reliable new sources of water in the future for those areas which have little to no water supply reliability now," he added.

Most Grassland landowners probably don't know that 1/3 of their water supplies have to be purchased with public dollars on the private market. What that means is government ends up competing against private interests to secure that water, and public dollars will simply not be able to match what private interests are willing to pay.

Currently the water program is focused on key wetland regions of California—Tulare Basin, Grasslands, Butte Sink, and the Sacramento-San Joaquin Delta. DU is addressing relevant issues within these regions including spring and summer irrigation water security, new water development, potential impacts to existing water supplies due to pending water transfers, water quality control and the impacts of increased urbanization on local wetland water supplies.

Development of the Wetland Water Program is timely due to the recent appointment of Rudy Rosen, director of DU's Western Regional Office, and Don

Marciochi, general manager of the Grassland Water District, to the Bay Delta Public Advisory Committee. Secretary of Interior Gale Norton's appointment of Rosen represents the second time that Ducks Unlimited has been asked to serve on this important committee.

As roughly half of California's water supplies flow through the Delta, it is critical that wetland and waterfowl interests be represented in the Bay Delta debate and the future of water in California. DU is excited about filling that role and serving California's wetland and waterfowl interests.

California has lost over 95% of its historic wetlands. Approximately 4 million ducks are crammed into what remains during the winter. These wetlands are entirely dependent on adequate, timely, and cost-effective water deliveries to support these birds. DU's Wetland Water Program is not just ensuring a future for managed wetlands in California, but is solidifying a continuing legacy of waterfowling.

For more information on DU's Wetland Water Program, government affairs or current legislation, contact Widell at (916) 852-2000.